In the Claims:

**1.** (original) A method for determining the distance between a first and second transmitting and receiving station (1, 2), characterized in that

in the first and second transmitting and receiving station (1, 2) a first and second transmission signal (S1, S2) is generated and is transmitted as a series of microwave pulses having a predefined pulse repetition frequency (fp1, fp2) to the respective other transmitting and receiving station (2, 1) and is received thereby in the form of a received signal (E2, E1), said pulse repetition frequencies (fp1, fp2) of the transmission signals (S1, S2) varying according to a predefined differential frequency value (fd),

in the first and second transmitting and receiving station (1, 2) first and second points of coincidence (t11, t12,...; t21, t22,...) are determined, which correspond to those moments in time, when the pulses of the transmission signal (S1, S2) sent by the respective transmitting and receiving station (1, 2) and the received signal (E1, E2) received by the respective transmitting and receiving station (1, 2) coincide,

the distance between the transmitting and receiving stations (1, 2) is determined from the distances (tm; x, y; U, D) between the points of coincidence.

**2.** (original) A method according to claim 1, characterized in that a distance of coincidence (tm) corresponding to the

time offset between the first and second points of coincidence is determined as a measure of the distance between the two transmitting and receiving stations (1, 2).

**3.** (original) A method according to claim 2, characterized in that information on the second points of coincidence (t21, t22) is transmitted via a radio channel from the second transmitting and receiving station (2) to the first transmitting and receiving station (1) and in that the distance of coincidence (tm) is determined in the first transmitting and receiving station (1) from the transmitted information and from the first points of coincidence (t11, t12) determined in the first transmitting and receiving station (1).

**4.** (original) A method according to claim 3, characterized in that the transmission of the information on the second points of coincidence (t21, t22) and the transmission of the transmission signals (S1, S2) is performed via different radio channels.

**5.** (original) A method according to claim 1, characterized in that the second transmission signal (S2) is modulated by frequency keying of its pulse repetition frequency (fp2) and that a change (td), resulting from frequency keying, of the distance (Td) between the first points of coincidence (t11, t12,...) is determined as a measure of the distance between the transmitting and receiving stations (1, 2).

**6.** (original) A method according to claim 5, characterized in that the pulse repetition frequency (fp2) of the second transmission signal (S2) is switched at frequency keying between two fixed frequency values (f21, f22), the switch being performed synchronously to the second points of coincidence (t21, t22, ...).

**7.** (original) A method according to claim 6, characterized in that the two fixed frequency values (f21, f22) are specified such that the change from one frequency value (f21) to the other frequency value (f22) causes duplication of the amount of the difference between the pulse repetition frequencies (fp1, fp2) of the transmission signals (S1, S2).

**8.** (original) A method according to claim 6, characterized in that the two fixed frequency values (f21, f22) are specified such that the change from one frequency value (f21) to the other frequency value (f22) causes a reverse counting of the difference between the pulse repetition frequencies (fp1, fp2) of the transmission signals (S1, S2).

Claims **9 to 12** (canceled).

**[REMARKS FOLLOW ON NEXT PAGE]**